

KSC2328A

NPN EPITAXIAL SILICON TRANSISTOR

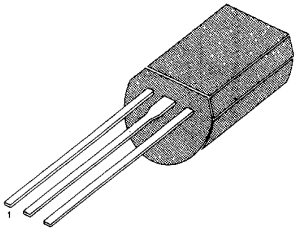
AUDIO POWER AMPLIFIER APPLICATIONS

- Complement to kSA928A
- Collector Dissipation $P_c=1W$
- 3 Watt Output Application

ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	2	A
Collector Dissipation	P_C	1	W
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature	T_{STG}	-55 ~ +150	$^{\circ}C$

TO-92L



1. Emitter 2. Collector 3. Base

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}C$)

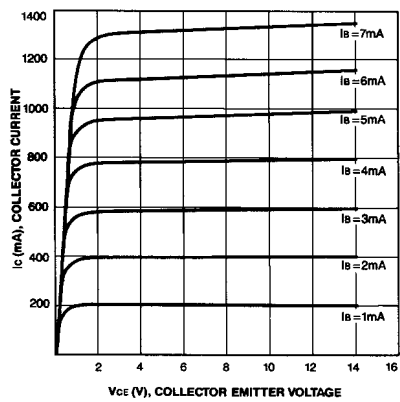
Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=100\mu A, I_E=0$	30			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=10mA, I_B=0$	30			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=1mA, I_C=0$	5			V
Collector Cut-off Current	I_{CBO}	$V_{CB}=30V, I_E=0$			100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$			100	nA
DC Current Gain	h_{FE}	$V_{CE}=2V, I_C=500mA$	100		320	
Base-Emitter On Voltage	$V_{BE}(on)$	$V_{CE}=2V, I_C=500mA$			1.0	V
Collector-Emitter Saturation Voltage	$V_{CE}(sat)$	$I_C=1.5A, I_B=0.03A$			2.0	V
Current Gain-Bandwidth Product	f_T	$V_{CE}=2V, I_C=500mA$		120		MHz
Output Capacitance	C_{OB}	$V_{CB}=10V, I_E=0, f=1MHz$		30		pF

h_{FE} CLASSIFICATION

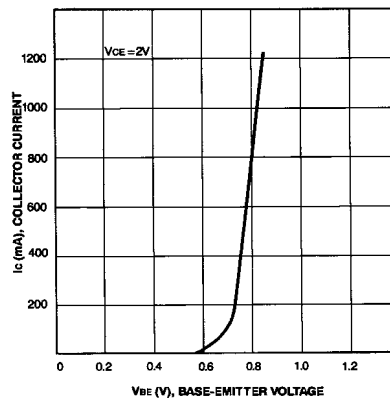
Classification	O	Y
h_{FE}	100-200	160-320



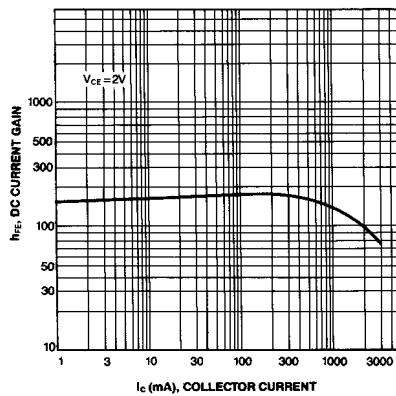
STATIC CHARACTERISTIC



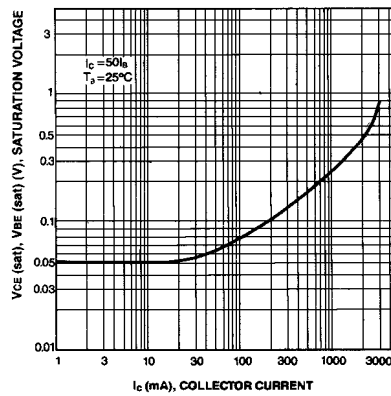
BASE-EMITTER ON VOLTAGE



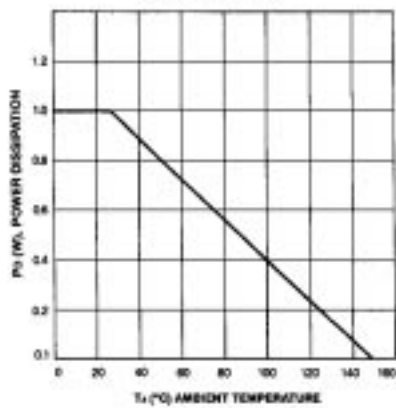
DC CURRENT GAIN



COLLECTOR-EMITTER SATURATION VOLTAGE



POWER DERATING



SAFE OPERATING AREA

